## CALIFORNIA DEPARTMENT OF TRANSPORTATION

#### **SUMMARY**

# PRICE INDEX FOR SELECTED HIGHWAY CONSTRUCTION ITEMS 1ST QUARTER ENDING MARCH 31, 2004

Index this quarter	278.9
Point change from last quarter	+140.7
Percentage changes from last quarter	+101.8%
Index last 12 months	155.0
Point change from previous report	+6.4
Percentage changes from previous report	+4.3%

Average number of bidders this quarter	5.3
Change in number of bidders from last quarter	-0.1

NOTE: All information shown in this publication was assembled using 1987 base year.

### CALIFORNIA DEPARTMENT OF TRANSPORTATION

#### HIGHWAY CONSTRUCTION COST INDEX

1ST QUARTER ENDING MARCH, 2004

Prepared by Division of Engineering Services - Office Engineer

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**NOTE:** All information shown in the publication was assembled using 1987 base year

The California Highway Construction Cost Index for the first quarter of 2004 stands at 278.9, up 140.7 points (101.8 percent) from the fourth quarter of 2003 index of 138.2. The Index for the year-to-date (April 1, 2003 through March 31, 2004) is 155.0, up 6.4 points (4.3 percent) from the fourth quarter 2003 year-to-date index of 148.6.

Cost increases were recorded in Roadway Excavation, Aggregate Base, Asphalt Concrete Pavement, Portland Cement Concrete (Pavement), Portland Cement Concrete (Structure), Bar Reinforcing Steel and Structural Steel. No cost decrease was recorded in this quarter.

The average number of bidders per project in the first quarter of 2004 was 5.3, down 0.1 bidder per project as compared to 5.4 for the fourth quarter of 2003 and down 0.9 as compared to 6.2 for the corresponding quarter in 2003.

The project values which provided the input for the preparation of this quarter's index are distributed as follows:

	RANGE NUMBER OF % PROJECTS		%	AMOUNTS OF PROJECTS	%	
UP	ТО	50,000	0	0	0	0
50,000	ТО	100,000	4	4.55	\$302,010	0.10
100,000	ТО	250,000	18	20.46	\$3,103,571	1.03
250,000	ТО	500,000	24	27.27	\$8,674,247	2.88
500,000	ТО	1,000,000	19	21.59	\$13,208,661	4.38
1,000,000	ТО	2,500,000	13	14.77	\$20,093,172	6.67
2,500,000	ТО	5,000,000	5	5.68	\$19,491,303	6.47
5,000,000	AND	ABOVE	5	5.68	\$236,485,426	78.47
		TOTAL	88	100.00	\$301,358.389	100.00

There were five contracts over \$5,000,000 opened during the first quarter. The Projects include:

- 1. Replace Bridge Deck in Shasta County at and near Lakeshore on Route 5 from 0.2 kilometer North of Antler Summit Overcrossing to 0.2 kilometer North of Antler Undercrossing. The low bid of \$5,726,916.00 was submitted by Shasta Contractors, Incorporated.
- 2. Construct HOV Lanes in Marin County in Larkspur, Corte Madera and San Rafael on Route 101 from 0.2 kilometer North of Tamalpais Drive Overcrossing to 0.1 kilometer South of Route 580/101 Separation. The low bid of \$7,154,458.00 was submitted by Balfour Beatty Construction, Incorporated.
- 3. Replace PCC Panels with AC and Overlay with Rubberized AC in Fresno County about 11.2 kilometers West of Firebaugh on Route 5 from 0.4 kilometer South of Panoche Road Overcrossing to Nees Avenue Overcrossing. The low bid of \$9,423,077.90 was submitted by W Jaxon Baker, Incorporated.
- 4. Rehabilitate Roadway and Bridge and Construct Truck Climbing Lane in San Bernardino County in and near Barstow and Yermo on Route 15 from East Main Street Overcrossing to 0.32 kilometer South of Rasor Road. The low bid of \$39,709,973.70 was submitted by F N F Construction, Incorporated.
- 5. Construct Pier T1 Foundation and Piers E2 of Bridge No. 34-0006 L/R in the City and County of San Francisco on Route 80 at Yerba Buena Island. The low bid of \$174,471,000.00 was submitted by Traylor Weeks, a Joint Venture.

The Federal Highway Administration Price Trends for Federal-Aid Highway Construction are based on information received for Federal-Aid construction contracts over \$500,000. Effective the first quarter of 1990 the Federal Highway Administration converted their index to 1987=100 base. The composite index for selected construction items the third quarter of 2003 is 138.4, down 13.0 points from 151.4 third quarter of 2003.

The Engineering News-Record's Construction Cost Index average for the first quarter of 2004 is 639.3 up 7.9 points from 631.4 last quarter. Their price index uses a 1967=100 base.

The U. S. Bureau of Labor Statistics' Consumer Price Index average for the first quarter 2004 is 186.3, for U. S. City average of all Urban Consumers, up 1.7 from 184.6 last quarter. Their Price Index uses a 1982-84=100 base.

The California Highway Construction Cost Indices and the Federal Highway Administration Composite Indices for selected construction items are based on 1987=100 and are shown on the accompanying graph (Exhibit D). The indices plotted are on a yearly average basis, which describes the trends more clearly by smoothing out the fluctuations between the individual quarters.

#### Construction item costs based on English units.

Roadway Excavation: \$15.03 per cubic yard

The price increased \$11.4 from the average unit price of \$3.63 per cubic yard last quarter. Unit bid prices ranged from \$6.12 to \$133.80 per cubic yard.

#### Aggregate Base: \$19.36 per ton

The price increased \$1.57 from the average unit price of \$17.79 per ton last quarter. Unit bid prices ranged from \$4.02 to \$59.55 per ton.

#### Asphalt Concrete Pavement: \$50.76 per ton

The unit price increased \$3.67 from the average unit price of \$47.09 per ton last quarter. Unit prices ranged from \$36.29 to \$489.88 per ton.

#### Portland Cement Concrete (Pavement): \$188.33 per cubic yard

The unit price increased \$69.46 from the average unit price of \$118.87 per cubic yard last quarter. Unit prices ranged from \$142.21 to \$321.11 per cubic yard.

#### Portland Cement Concrete (Structure): \$828.64 per cubic yard

The unit price increased \$491.57 from the average unit price of \$337.07 per cubic yard last quarter. Unit prices ranged \$229.37 to \$5351.88 per cubic yard.

#### Bar Reinforcing Steel: \$0.78 per pound

The unit price increased \$0.17 from the average unit price of \$0.61 per pound last quarter. Unit prices ranged from \$0.70 to \$11.34per pound.

#### Structural Steel: \$5.59 per pound

The unit price increased \$3.22 from the average unit price of \$2.37 per pound last quarter. Unit prices ranged from \$3.18 to \$16.56 per pound.

#### Construction item costs based on Metric units.

Roadway Excavation: \$19.66 per cubic meter

The price increased \$14.91 from the average unit price of \$4.75 per cubic meter last quarter. Unit bid prices ranged from \$8.00 to \$175.00 per cubic meter.

Aggregate Base: \$21.34 per tonn

The price increased \$1.73 from the average unit price of \$19.61 per tonn last quarter. Unit bid prices ranged from \$4.44 to \$65.65 per tonn.

Asphalt Concrete Pavement: \$55.96 per tonn

The unit price increased \$4.05 from the average unit price of \$51.91 per tonn last quarter. Unit prices ranged from \$40.00 to \$540.00 per tonn.

Portland Cement Concrete (Pavement): \$246.32 per cubic meter

The unit price increased \$90.85 from the average unit price of \$155.47 per cubic meter last quarter. Unit prices ranged from \$186.00 to \$420.00 per cubic meter.

Portland Cement Concrete (Structure): \$1,083.82 per cubic meter

The unit price increased \$642.95 from the average unit price of \$440.87 per cubic meter last quarter. Unit prices ranged \$300.00 to \$7,000.00 per cubic meter.

Bar Reinforcing Steel: \$1.71 per kilogram

The unit price increased \$0.37 from the average unit price of \$1.34 per kilogram last quarter. Unit prices ranged from \$1.55 to \$25.00 per kilogram.

Structural Steel: \$12.33 per kilogram

The unit price increased \$7.11 from the average unit price of \$5.22 per kilogram last quarter. Unit prices ranged from \$7.00 to \$36.50 per kilogram.

#### EXHIBIT A

## PRICE INDEX FOR SELECTED CALIFORNIA CONSTRUCTION ITEMS 1987 = 100

			LAST 12	
<b>YEAR</b>		QTRLY	MONTHS	<u>ANNUAL</u>
1972				30.0
				31.2
				45.6
-				46.7
				47.7
				53.7
				62.1
				80.1
				82.1 90.6
				81.3
				81.9
				93.3
				92.7
				95.0
				100.0
1988				104.4
1989				111.3
1990				113.5
1991				108.2
1992				106.8
				113.1
				119.0
				115.0
				119.2
1997	(1st Quarter)	157.0	124.7	
	(2nd Quarter)	. 108.2	119.6	
1997	(3rd Quarter)(4th Quarter)	144.8	125.4	
1997	(3rd Quarter)(4th Quarter)(Year)	155.1		124.8
1998	(1st Quarter)	113.0	120.1	124.0
	(2nd Quarter)	131.6	130.4	
	(3rd Quarter)	162.8	133.3	
1998	(4th Quarter)	126.5		
	(Year)			128.6
1999	(1st Quarter)	129.4	133.5	
	(2nd Quarter)	140.3	136.4	
	(3rd Quarter)	. 174.5	136.6	
1999	(4th Quarter)	115.2		
0000	(Year)			139.2
2000	(1st Quarter)	. 162.7 167.6	148.1	
	(2nd Quarter)		156.5	
	(3rd Quarter)		144.7	
2000	(4th Quarter)(Year)			146.2
2001	(1st Quarter)		137.0	140.2
	(2nd Quarter)		134.8	
	(3rd Quarter)		141.6	
	(4th Quarter)	. 183.3	111.0	
	(Year)			154.1
2002	(1st Quarter)		157.5	
	(2nd Quarter)		148.4	
	(3rd Quarter)		149.7	
	(4th Quarter)	. 153.7		
	(Year)			142.2
	(1st Quarter)		143.2	
	(2nd Quarter)		155.6	
2003	(3rd Quarter)	. 190.7	158.3	
2003	(4th Quarter)			
0001	(Year)	070.0		148.6
∠004	(1st Quarter)	218.9	155.0	

#### **EXHIBIT B**

#### **ENGLISH UNITS**

#### CALIFORNIA DEPARTMENT OF TRANSPORTATION **AVERAGE HIGHWAY** CONTRACT PRICES

	ROADWAY EXCAVATION "1"	AGGREGATE <u>BASE</u>	ASPHALT CONCRETE PAVEMENT	PCC <u>PAVEMENT</u>	CLASS "A' PCC STRUCTURE	BAR REINFORCING STEEL	STRUCTURAL STEEL "2"
	PER CU YD	PER TON	PER TON	PER CU YD	PER CU YD	PER LB	PER LB
1972	0.95	3.21	8.22	19.23	82.08	0.159	0.446
1973	0.75	3.14	9.02	19.24	93.60	0.169	0.635
1974	1.26	4.23	13.01	28.59	115.19	0.329	0.987
1975	1.19	4.70	14.24	30.63	132.10	0.239	0.838
1976	1.32	4.70	13.67	29.64	143.05	0.223	0.504
1977	1.76	5.44	15.15	35.17	150.03	0.239	1.228
1978	1.85	6.18	17.70	41.77	180.77	0.276	0.814
1979	2.36	7.49	22.40	52.39	234.24	0.383	1.960
1980	2.10	8.38	25.51	55.18	235.45	0.378	1.942
1981	3.14	8.63	28.53	59.45	226.84	0.386	2.091
1982	2.58	7.56	24.69	57.10	224.72	0.320	2.155
1983	2.10	9.20	27.57	52.04	225.84	0.335	2.155
1984	3.19	13.67	28.38	55.79	238.48	0.375	2.155
1985	2.77	11.55	30.15	64.13	232.39	0.413	2.288
1986	3.01	12.76	28.82	60.49	249.74	0.412	2.388
1987 1988	2.97	17.57	27.54	70.62	280.40	0.418	2.546
1989	4.16 4.19	10.13 10.62	27.46 29.43	58.66 73.78	284.55 303.49	0.440 0.483	3.956 3.103
1990	4.73	12.05	30.77	68.93	295.24	0.469	2.209
1990	3.08	10.07	33.43	62.64	295.24	0.431	2.284
1992	3.62	9.76	32.46	66.78	265.31	0.419	3.073
1993	4.53	9.89	35.41	66.76	243.79	0.419	2.706
1994	4.68	10.39	37.15	66.45	277.92	0.547	2.334
1995	4.10	10.18	35.29	63.85	298.80	0.499	2.266
1996	3.80	9.74	37.66	65.93	321.88	0.512	2.172
1st Quarter 1997	5.79	10.46	39.05	248.72	376.38	0.610	2.050
2nd Quarter 1997	3.80	9.82	34.23	76.68	267.68	0.444	3.418
3rd Quarter 1997	8.23	10.39	38.09	88.50	300.20	0.537	2.220
4th Quarter 1997	8.79	11.82	39.85	76.40	354.50	0.508	2.530
Year 1997	5.25	10.29	36.07	78.48	308.54	0.496	2.337
1st Quarter 1998	4.24	9.37	35.41	66.99	283.64	0.455	1.784
2nd Quarter 1998	4.71	12.13	37.63	89.68	336.27	0.635	2.963
3rd Quarter 1998	8.39	12.41	45.23	101.57	361.63	0.575	2.748
4th Quarter 1998	3.95	12.19	42.82	83.00	318.20	0.519	2.205
Year 1998	4.95	11.55	38.78	75.91	319.95	0.553	2.595
1st Quarter 1999	6.18	11.94	40.06	57.07	276.07	0.523	3.893
2nd Quarter 1999	6.35	12.74	40.62	94.56	331.12	0.485	3.161
3rd Quarter 1999	8.79	13.93	39.80	78.28	479.02	0.643	2.687
4th Quarter 1999	3.24	12.22	39.83	95.85	264.92	0.556	4.624
Year 1999	6.55	12.86	40.14	77.95	321.22	0.521	3.215
1st Quarter 2000	6.32	13.62	43.83	116.91	465.68	0.512	3.370
2nd Quarter 2000	7.55	11.35	45.35	68.11	458.34	0.608	4.477
3rd Quarter 2000	4.52	11.47	44.43	82.34	325.42	0.530	3.106
4th Quarter 2000	8.34	10.20	46.91	73.21	306.83	0.487	2.509
Year 2000	6.21	11.14	45.12	78.14	363.59	0.507	2.754
1st Quarter 2001 2nd Quarter 2001	3.84 5.94	11.25 17.61	41.01 46.32	69.94 103.69	422.47 273.57	0.673	5.139 3.098
3rd Quarter 2001	8.70	14.39	50.25	60.60	360.93	0.609 0.620	4.339
4th Quarter 2001	9.66	13.60	40.00	94.05	504.96	0.599	3.725
Year 2001	5.83	14.58	43.89	75.74	425.17	0.612	3.906
1st Quarter 2002	5.45	11.42	46.47	67.38	388.68	0.497	2.401
2nd Quarter 2002	3.18	13.17	48.50	67.60	346.91	0.498	3.050
3rd Quarter 2002	10.77	12.12	49.56	111.78	317.79	0.545	4.783
4th Quarter 2002	5.40	12.80	50.62	139.49	369.91	0.511	3.262
Year 2002	4.84	12.42	49.00	74.15	363.50	0.508	3.248
1st Quarter 2003	12.45	11.97	49.97	122.74	340.54	0.504	3.188
2nd Quarter 2003	4.80	13.26	47.24	76.24	460.14	0.734	4.048
3rd Quarter 2003	10.68	14.64	49.16	131.54	415.17	0.622	1.385
4th Quarter 2003	3.63	17.79	47.09	118.87	337.07	0.608	2.370
Year 2003	5.05	15.05	48.35	109.96	362.75	0.600	1.710
1st Quarter 2004	15.03	19.36	50.76	188.33	828.64	0.775	5.593

UNCLASSIFIED BEGINNING 1 $^{\rm st}$  QUARTER 2003, STRUCTURAL STEEL INCLUDES THE FURNISH AND ERECT STRUCTURAL STEEL (BRIDGE)

#### EXHIBIT B

#### METRIC UNITS CALIFORNIA DEPARTMENT OF TRANSPORTATION AVERAGE HIGHWAY CONTRACT PRICES

	ROADWAY EXCAVATION "1"	AGGREGATE BASE	ASPHALT CONCRETE PAVEMENT	PCC <u>PAVEMENT</u>	CLASS "A' PCC STRUCTURE	BAR REINFORCING STEEL	STRUCTURAL STEEL " 2 "
	PER M3	PER TONN	PER TONN	PER M3	PER M3	PER KG	PER KG
1972	1.24	3.54	9.06	25.15	107.36	0.351	0.983
1973	0.98	3.46	9.94	25.16	122.42	0.373	1.400
1974	1.65	4.66	14.34	37.39	150.66	0.725	2.176
1975	1.56	5.18	15.70	40.06	172.78	0.527	1.847
1976	1.73	5.18	15.07	38.77	187.10	0.492	1.111
1977	2.30	6.00	16.70	46.00	196.23	0.527	2.707
1978	2.42	6.81	19.51	54.63	236.44	0.608	1.795
1979	3.09	8.26	24.69	68.52	306.37	0.844	4.321
1980	2.75	9.24	28.12	72.17	307.96	0.833	4.281
1981	4.11	9.51	31.45	77.76	296.70	0.851	4.610
1982	3.37	8.33	27.22	74.68	293.92	0.705	4.751
1983	2.75	10.14	30.39	68.07	295.39	0.739	4.751
1984	4.17	15.07 12.73	31.28	72.97	311.92	0.827	4.751
1985 1986	3.62 3.94	14.07	33.23 31.77	83.88 79.12	303.95 326.65	0.911 0.908	5.044 5.265
1987	3.88	19.37	30.36	92.37	366.75	0.908	5.613
1988	5.44	11.17	30.27	76.72	372.18	0.922	8.721
1989	5.48	11.71	32.44	96.50	396.95	1.065	6.841
1990	6.19	13.28	33.92	90.16	386.16	1.034	4.870
1991	4.03	11.10	36.85	81.93	386.12	0.950	5.035
1992	4.73	10.76	35.78	87.34	347.01	0.924	6.775
1993	5.93	10.90	39.03	87.32	318.87	1.023	5.966
1994	6.12	11.45	40.95	86.91	363.51	1.206	5.146
1995	5.36	11.22	38.90	83.51	390.82	1.100	4.996
1996	5.09	10.74	41.51	86.23	421.00	1.129	4.788
1st Quarter 1997	7.57	11.53	43.05	325.31	492.29	1.345	4.519
2nd Quarter 1997	4.97	10.82	37.73	100.29	350.11	0.979	7.535
3rd Quarter 1997	10.76	11.45	41.99	115.75	392.65	1.184	4.894
4th Quarter 1997	11.50	13.03	43.93	99.93	463.67	1.120	5.578
Year 1997	6.87	11.35	39.76	102.65	403.56	1.094	5.152
1st Quarter 1998	5.55	10.33	39.03	87.62	370.99	1.003	3.933
2nd Quarter 1998	6.16	13.37	41.48	117.30	439.82	1.400	6.532
3rd Quarter 1998	10.97	13.68	49.86	132.85	472.99	1.268	6.058
4th Quarter 1998	5.17 6.47	13.44 12.73	47.20 42.75	108.56 99.29	416.20 418.48	1.144 1.219	4.862 5.721
Year 1998 1st Quarter 1999	8.08	13.16	42.75 44.16	74.64	361.09	1.153	8.583
2nd Quarter 1999	8.30	14.04	44.78	123.68	433.08	1.069	6.969
3rd Quarter 1999	11.50	15.36	43.88	102.39	626.53	1.418	5.924
4th Quarter 1999	4.23	13.47	43.91	125.37	346.51	1.225	10.194
Year 1999	8.57	14.17	44.24	101.95	420.15	1.148	7.088
1st Quarter 2000	8.27	15.02	48.31	152.91	609.09	1.128	7.431
2nd Quarter 2000	9.87	12.51	49.99	89.09	599.48	1.341	9.871
3rd Quarter 2000	5.92	12.64	48.97	107.70	425.63	1.169	6.848
4th Quarter 2000	10.91	11.25	51.71	95.75	401.31	1.073	5.532
Year 2000	8.12	12.28	49.73	102.21	475.55	1.118	6.071
1st Quarter 2001	5.02	14.61	45.20	91.48	552.57	1.483	11.329
2nd Quarter 2001	7.77	19.41	51.06	135.62	357.82	1.342	6.831
3rd Quarter 2001	11.38	15.86	55.39	79.27	472.08	1.367	9.565
4th Quarter 2001	12.64	15.00	44.10	123.01	660.46	1.321	8.213
Year 2001	7.63	16.07	48.39	99.06	556.10	1.349	8.612
1st Quarter 2002	7.13	12.59	51.22	88.13	508.37	1.095	5.292
2nd Quarter 2002 3rd Quarter 2002	4.15 14.09	14.52 13.36	53.46 54.63	88.42 146.20	453.74 415.65	1.099	6.724 10.544
4th Quarter 2002	7.07	14.11	54.63 55.80	182.45	415.65 483.82	1.201 1.126	7.191
Year 2002	6.32	13.70	54.01	96.99	403.02 475.44	1.120	7.191 7.160
1st Quarter 2003	16.29	13.70	55.08	160.54	475.44 445.40	1.120	7.160
2nd Quarter 2003	6.28	14.61	52.07	99.72	601.84	1.619	8.925
3rd Quarter 2003	13.97	16.14	54.19	172.05	543.03	1.371	3.053
4th Quarter 2003	4.75	19.61	51.91	155.47	440.87	1.340	5.224
Year 2003	6.60	16.59	53.30	143.82	474.45	1.313	3.769
1st Quarter 2004	19.66	21.34	55.96	246.32	1,083.82	1.710	12.330

UNCLASSIFIED BEGINNING 1<sup>st</sup> QUARTER 2003, STRUCTURAL STEEL INCLUDES THE FURNISH AND ERECT STRUCTURAL STEEL (BRIDGE)